

Weak Supportive System and Livelihood Status among Fisherfolk in Poovar Fish Landing Centre, Kerala

Dr. S. Premjith¹, Saisree K.G²

¹(Principal Investigator, Rajiv Gandhi Institute of Development Studies, Sasthamangalam, Thiruvananthapuram, Kerala, India)

²(Senior Research Fellow, Department of Economics, NSS College for Women, University of Kerala, India)

Abstract : The study was conducted to assess the livelihood status of fisherfolk in Poovar Fish Landing Centre of Kerala. Data were collected and examined through the use of well-structured interview schedule from the Poovar fishermen community. A total of 103 house heads were interviewed. Most of the fishermen belonged to the age group 15-30 years. Fishing and marketing were the major sources of income for the sample population. During some season, when the sea becomes very rough, the fisher folk are forced to remain idle and live under conditions of severe poverty. Most of them have semi-kutchas. All sample houses are electrified and Liquefied Petroleum Gas are being used. The educational status of the head of these households reveals that 34% are illiterate. The activity status of the households show that only 33.4% of people are fully engaged in fishing and related activities and nearly 43.5% are dependants. The poor livelihood status, improper occupational structure and poor institutional support prevailing among these fisherfolk should be improved through controlling the dependence of traders, periodical awareness classes against smoking and alcohol consumption, training programmes for bivalve fishery, aquaculture and mariculture, human resource utilization and management.

Keywords - Fisherfolk, Livelihood status, supportive system, fish landing centre, Income, Activity status

I. INTRODUCTION

Fishery is an important sector in most of the developed and developing countries of the world from the standpoint of income and employment generation. Fishing communities in India are not homogeneous, as they belong to different castes and have their distinct geographical, social, cultural, economic and traditional structures, depending on the coast, where they populate. According to the available estimates of the potential fishery resources of the west coast, particularly in south west coasts, Kerala possess the richest fishing grounds in the area. Kerala's contribution to the national marine fish production is about 20% [1]. But the socio-economic condition of the fisher folk in the state is deplorable, when compared to the general segment of population. Their livelihood patterns and such other reasons clearly shows this. The reduction of fish assets is a major cause for the backwardness of fishermen. They are in the clench of subsistence and also indebtedness in the regular aspect of their life.

Poovar Panchayat in Parassala Block of Thiruvananthapuram district with a total area of 7.34 sq.km and a population of 25.6 thousands lies at the very southern tip of Kerala state at about 28 Km south of Thiruvananthapuram city. The revenue village "Poovar" has a land area, roughly covering about 4000 acres [2]. Poovar is a historically important, ecologically diverse and socially and religiously rich village of which nearly two fifths are Hindus about one third are Christians and more than one fourth are Muslims. Almost 60% of the Christians are fisherfolk. It has four coastal wards predominantly inhabited by the fishermen community.

In history, there are references of a fish landing centre at southern tip of the Thiruvananthapuram then called "Offier" (Mary Helen, 2009). Fishing and marketing are the major sources of income for the coastal people of Poovar Panchayat. In this paper, an attempt has been made to examine livelihood options, supportive systems, the resource base and livelihoods and other main aspects of the fishermen communities of Poovar fish landing centre in Kerala.

II. MATERIALS AND METHODS

The present study was undertaken in three wards, close to Poovar fish landing centre, Thiruvananthapuram district, covering a total population of 535 fishermen, coming under 103 families. The village is located at about 32 km away from Thiruvananthapuram city and is famous for its golden sand beach. Pre-tested interview schedule was used for data collection after conducting a preliminary survey to suit the local conditions. Data were collected directly from the fishermen families through personal discussions and interviews regarding the

various aspects of their livelihood conditions and other aspects. Simple percentages and tabular analysis were used for arriving at the results.

III. RESULTS

Demographic Factors: The fisherfolk live close to the sea on common lands unlike the mainstream population. The high density of population is a serious matter of concern for the quality of life of the people and the housing problem is very acute. This has been pointed out as an indication of low social development and low status of women in fisherfolk. The average family size of a fishermen community is 6 to 7 members. In this study, family sizes of fishermen are divided into three categories according to the numbers. Nearly 20% had members 7-10, and categorized as large family; most families had (45%) 5 to 6 members, and categorized as medium family and 35% had members 2 to 4, categorized as small family. The share of men in the sample households is greater, which is implying more men (55.3%) in many of the sample households than women (44.7%). It shows that the sex ratio among the fisher folk in Poovar is unfavourable. The data revealed that age group of 15-30 years was highest (32.1%), while the age group of 0-14 years was 18.9%. The age group of 31-45 years was 25.8%, while the age group of 46-60 years was 18.9%. The proportion of the child population is about one third and of the elderly population above 60 years is less than 5%. It is found that the middle age group was the highest in age group wise.

The present study shows that the fertility rates have declined heavily in recent years. The low proportion of the elderly population are an indication of lower life expectancy and poor health and hygiene status. Hard labour, unhygienic living conditions and unscientific health and hygiene practices lead to high morbidity and mortality rates among fisherfolk. Livelihood Status: The livelihood status of fisherfolk community is presented in Table 1.

Land Holdings and Housing conditions: The land holdings of the households show that 26.2% have less than 2 cent of land, 54.4% have two to four cent of land and 15.5% have more than 5 cent of land. Most of them have own house in slum like and crowded settlements and the nature of house indicates that 35.9% have pucca houses, 61.2% have semi-kutchha houses and 2.9% have Kutchha houses. All sample houses are electrified, 94.2% were used Liquefied Petroleum Gas and 87.4% have proper sanitation facilities.

Drinking water facility: The drinking water facility of sample houses is very poor. Majority of the households have bore well facility but the water could not be used for drinking because of salinity. For drinking purpose they use common pipe (78.6%) and common well (21.4%). Drinking water for the thickly populated coastal neighbourhoods of the area is brought from open wells or tube wells enacted about five kilometres away from the coastal areas and is supplied through tanker lorries by state authorities.

Category: The category wise distribution of households show that 71.8% are Below Poverty Line card holders and 28.1% are Above Poverty Line card holders. This clearly shows an evidence of the poor condition of majority population in the sample area.

Religion: The entire 103 fishermen interviewed in the sample area belonged to the Latin Catholic community and most of them are converts from the Mukkuva caste groups. They go to church on Sundays and also on other special days. This religious attitude may be because of the nature of their occupation, which is highly uncertain, challenging and risky.

Education: The educational status of the head of the household reveals that 34% are illiterate, 35.9% have primary level, 28.2% have secondary level and only 1.9% have higher level of education. But this situation is varied in case of educational status of family members. The educational status of the family members of the household reveals that 13.1% are illiterate, 53.5% have primary level, 26.7% have secondary level and only 6.7% have higher level of education.

Activity Status: The National Sample Survey Organisation defines following three broad Activity Status i) Working (engaged in an economic activity) i.e., 'Employed' ii) Seeking or available for work i.e., 'Unemployed' and iii) Neither seeking nor available for work. Around 85% of the head of the household depends on fishing and related activities, 11.7% depends on other sectors and 2.9% are unemployed. But in the case of family members, only 34% are engaged full time in fishing and related activities, majority of 43.7% population remain as dependents (housewives, infants, children, old age people), 15.9% are employed in organised and unorganised sectors and nearly 7% of the population are still unemployed.

Monthly Income and expenditure: The monthly income of 46.3% of the fishermen (head of the household) had average monthly income ≤ 5000 , 40.1% of the fishermen had average monthly income ranged between 5001 to

10,000 and only 13% had income ranged >10000 . The average monthly income of the head of a household (fishermen) is Rs. 6000/-.

Table 1: Livelihood status of fishermen in study area (Poovar)

Indicators		Number	Percent
Family size N=103	Small	36	35.0
	Medium	47	45.6
	Large	20	19.4
Gender N=535	Male	296	55.3
	Female	239	44.7
Age N=535	0-14	101	18.9
	15-30	172	32.1
	31-45	138	25.8
	46-60	101	18.9
	>60	23	4.3
Land holdings N=103	<2	27	26.2
	2--4	56	54.4
	>5	16	15.5
	No own land	4	3.9
Housing conditions N=103	Kutcha	3	2.9
	Pucca	37	35.9
	Semi Kutcha	63	61.2
Education N=103	Illiterate	35	34.0
	Below SSLC	37	35.9
	SSLC	21	20.4
	Pre-degree/Plus two	8	7.8
	Degree	2	1.9
Activity Status N=535	Fishing	141	26.2
	Fish sale	41	7.2
	Students/Housewives/Old people /Infants/Children	234	43.5
	Unemployed	37	6.9
	Government job	65	12.1
	Non Resident Indians	17	3.8
Addictions** N=103**	Alcohol	102	99
	Smoking	95	92.2
	Thambakk(chew)	96	93.2
Monthly Income of Head of HH* (N=103)	<5000	48	46.3
	5001-10000	42	40.7
	>10000	13	13.0
Water supply (N=103)	Common Pipe	81	78.6
	Common Well	22	21.4
Category (N=103)	BPL	74	71.8
	APL	27	26.3
	NA	2	1.9

Source: Field Survey *HH-Household NA-Not Applicable

**Multiple response

N=103 for head of the household

N=535 for household families

IV. SUPPORTIVE SYSTEMS

Institutional support: Most of the fishermen have active involvement with co-operative societies and welfare organizations or societies, either government or non-government. The main function of these organisations/societies include house construction, fish marketing, boat building and repair, community welfare, socio-economic cultural development of fishermen, conduct training programmes to initiate employment schemes etc. Majority of the respondents (96.7%) argued that the performance of these institutions are very poor.

Marketing facilities: The market chain from fishermen to consumers passes through a number of mediators such as: local fish traders, wholesalers and retailers. The exploitation of the fishery wealth by middlemen or traders is the main problem of the study area. Around three to four traders or middlemen are involved between fishermen and consumers in fish marketing system in this area. Some marketing restrictions were reported by fishermen, including higher transportation cost, poor supply of ice, and exploitation by middlemen, as a result of lower market prices. As a result, the perishable product of fish get damaged and the retailers sold these in cheap prices, sometimes they even failed to get any revenue due to quality deterioration. The majority (85%) of the respondents reported the exploitation by middlemen as the single most constraints of fish marketing and remaining 15% respondents reported poor icing facility, lack of infrastructure, and lack of finance. This reveals that the state did not bring about any real benefits to the fishermen in the study area.

Training: The Office of the Assistant Director of Fisheries, Govt. of Kerala at Vizhinjam functions with the aim of providing training for fishermen in sea rescue operations. Almost 98% of the sample fishermen have not attended any training programmes from government or non government organisations so far. As mentioned earlier, majority of the fishermen in the study area are following the traditional fishing methods, which were developed over centuries of learning-through-labour using locally available equipments and indigenous skills.

Number of Working Days: The sample fishermen reported that the average fishing days in a month ranges from 12 days in bad season and around 20 days in good season.

Consumption and expenditure: The consumption pattern indicated that nearly three fourth of the household expenditure was for household consumption. Nearly 90% of the households owned television, 66% owned refrigerator, 85% owned mobile phones and 23% had audio sets.

The total average annual expenditure of fishermen family was also worked out which ranged from Rs. 3,800 for small families and Rs. 102,000 for large families. The expenses were categorized into household expenses, which include expense for health, fuel, electricity, water, phone, fishing, educational and other expenses. It is observed that more than 55% of the expenses were for food and related household expenses, followed by health (15%), electricity (9.2%) and others (18%) respectively.

V. CONCLUSION

Fishing plays an important role in the livelihood of marine people in Kerala. The present study on livelihood status of fishermen was conducted during the period September 2016 to November 2016 in three wards of Poovar fish landing area. Total 103 fishermen were interviewed, out of which nearly 50% were less than 50 years of age. The entire 103 fishermen interviewed in the area belonged to the Latin Catholic Mukkuva of Christian community. Generally, traditional fishermen are forced to take up different types of income generating activities during non fishing period. But in this study area, most of the fishermen were not interested to engage other income generating activities or job. Therefore the families are forced to fully depend upon fishing and fish sale. During some season, when the sea becomes very rough, the fish workers are forced to remain idle and live under conditions of severe poverty. Most of them have pucca houses. All sample houses are electrified and Liquefied Petroleum Gas are being used. 87.4% of the houses have proper sanitation facilities. The educational status of the family members reveals that 13.1% are illiterate, 53.5% have primary level, 26.7% have secondary level and only 6.7% have higher level of education. The activity status of the family members shows that only 34% of people are engaged full time in fishing and related activities, majority of 43.5% population as dependents (housewives, infants, children, old age people), 15.9% are employed in organised and unorganised sectors and nearly 7% of the population are still unemployed. The average monthly income of the head of a household (fishermen) is Rs. 6000/-. The consumption pattern indicates that nearly three fourth of the household expenditure was mainly utilized for household consumption. Because of the poor financial background, majority of the fishermen have no boats and fishing gears and they are working as labourers to meet the both ends. The poor livelihood status, improper occupational structure and poor institutional support prevailing among fisherfolk should be improved. Socio economic constraints such as

illiteracy, family pressure, low economic status and unemployment are the major problems faced by the Poovar fishermen community. Most of them are illiterate and belong below poverty line and are struggling to survive with health, nutrition, and other day to day problems and they are not ready to engage themselves in any other income generating activities. Most of the respondents have land holdings of below two cents, so they could not engage themselves in any small scale agriculture or related activities during bad season. Majority (99%) of the fishermen are alcoholic, 92% are smokers and 93% are tambakk chewers. During the bad season of fishing, few fishermen still try going to fishing centres in other districts for group mechanised fishing, in order to carry out occupation of their interest.

Fishermen are completely engaged (18-22 days in a month) in fishing for four to five months, using different types of gears like 'Thattu vadi' (boat seines), 'Kamba vala' (Shore seines), 'Choonda' (hooks and lines) and 'Pattu vala' (drift nets). In the remaining 7 or 8 months, the fishermen does not get much benefit from fishing because of the bad climatic conditions. Most of the fishermen catch fish by grouping and others are individual group fishermen. Group fishermen use 'Kamba vala' (Shore seines) and it requires 8 to 10 fishermen to operate. Individual fisherman uses 'Choonda' (hooks and lines). Only 12% Fishermen have their own Boats and nets, and 88% fishermen lack boats and nets of their own.

They start fishing at about 4 pm and continue till next day 5 or 6 am. A Group of 8 to 10 fishermen catches about average of 25 to 30 kg of fish per day. Most of the days they catch *Sardinella Longiceps/gibbosa* (Goldstripe sardinella), *Rastrelliger kanagurta* (Indian Mackerel), *Stolephorus indicus* (Indian anchovy), *Rhinoptera javanica* (Javanese Cow Nose Ray), *Elagatis bipinnulata* (milk fish), *Uroteuthis duvauceli* (Indian squid) etc. The fishermen sell their catches in the morning near the landing centre to the traders or the retailers, who sell it to the market. The owner of nets and boats gets 25% of the total cash obtained from the catch sale and the remaining 75% of the money is equally divided among the fishermen.

In sample area, for fish handling, marketing and processing facilities, there exists only one market and one fish freezing/drying plant. But now the plant too is not in working condition. Due to the lack of any proper facility for fish processing, the large quantities of fishes available at high fishing seasons, are dumped to the sea itself due to its very low market value. These facilities should be considered according to the type of fishes and the products marketed. It is necessary to have reliable information on the daily fish landings in this area, on the basis of the daily quantities expected to be handled. The women in this region were very involved in the traditional way of fish drying and the sale of fish. They too face several problems in the market by male traders and problems to sell fresh fish viably as iced fish from the mechanized sector got dumped in the market.

The study reveals that due to the poor financial background, majority of the fishermen have no boats and fishing gears and they are forced to work as fishing labourers. Majority of them have not attended any training programmes. All of them are members of government/non government fishermen welfare organisations/societies. But the fishermen are not satisfied with the activities of these societies. On the part of the government, there exists some financial assistance for house construction/maintenance, construction of sanitation, electricity connection, and small saving schemes. The above study reveals poor livelihood status, improper occupational structure and poor institutional support in the selected area. In order to overcome this situation, there should be the provision of some sort of alternate jobs for fishermen by government and NGOs or skill development training for income generation at the time of bad season. The government should also take steps to control the interference of traders or middle men and thus create safe environment for the fishermen to carryout direct selling in the market. Health services of this fishing area should be ensured through government assistance. Periodical awareness classes against smoking and alcohol consumption should be conducted through these health service centres to fishermen. Promotion and development of various agro-farming involving agro horticulture crops are some other options which are needed to be implemented in this area. Training should be provided for bivalve fishery, aquaculture and mariculture; human resource utilization and management are to be developed and implemented in a phased manner for the balanced and sustainable development of marine fishery sector in this area.

Acknowledgements

Authors are thankful to Kerala State Council for Science, Technology and Environment for providing financial assistance to carry out this research work. The authors are also grateful to the Director, Rajiv Gandhi Institute of Development Studies for providing facilities for undertaking this investigation.

REFERENCES

- [1]. Rajlaxmi Mohanty, *Review on Fishery in Kerala Perspective* (National Council of Applied Economic Research, New Delhi, India 2013)
- [2]. George M.K. and Domi J., *Residual Illiteracy in a coastal village: Poovar village of Thiruvananthapuram district* (Kerala Research Programme Local level Development, Centre for Development Studies, Thiruvananthapuram, 2002)
- [3]. Helen Mary, *Studies on Hydrochemistry and Bacteriology of coastal waters Adjacent to beach resorts of Poovar – Vizhinjam Area, South West Coast of India*. Ph.D Thesis, University of Kerala, 2009.